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ABSTRACT

Developing and maintaining effective partnerships with employers has always been an important part of career and technical education (CTE). Recently, however, the need for and nature of these relationships have changed. Effective partnerships are no longer focused on specific activities and programs or employers merely donating resources or money; instead, employers are becoming actively involved in improving education. Traditional one-on-one pairing of schools and businesses is also being replaced by collaborations addressing educational improvement/reform and involving intermediaries. Three examples of intermediaries that foster development of education-business relationships are as follows: (1) the Gulf Coast Process Technology Alliance; (2) the Prosser School of Technology Heavy Equipment Operation Program; and (3) the Partnership for America's Future, Inc. All three examples involve multiple employers and educational institutions, provide applied learning opportunities, and offer valuable lessons about the following aspects of school-business partnerships: (1) planning and development; (2) implementation and management; (3) monitoring and evaluation; and (4) planning for the future. CTE educators can take the following steps to establish and maintain effective partnerships: (1) develop the partnership on the basis of mutual needs; (2) if possible, work with multiple employers; (3) involve all stakeholders; and (4) be sensitive to business culture. (Contains 11 references.) (MN)

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IN Brief
Fast Facts for Policy and Practice
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by Susan Imel

# Business-Industry Relationships and CTE

Developing and maintaining effective relationships with employers has always been an important part of career and technical education. Recently, the need for and the nature of these relationships have changed because "education and skills have become a more stark dividing line between success and failure in the new labor market" (Committee for Economic Development 1998, p. 1). The skills that equipped individuals to enter and flourish in the work force 2 decades ago are inadequate today, and employers are finding it challenging to recruit and retain qualified workers (ibid.; ***Making the Connection*** [2000]). In a survey of executives of employer associations, over 75% of those responding believed that K-12 school systems are not doing a good job, and 66% said that schools have not improved overall in the last 10 years (***Making the Connection*** [2000]).

Because of the perceived disjuncture between what is being taught and assessed in schools and what is actually required in the workplace, the types of school-business relationships that worked in the past are inadequate; new infrastructures are needed (Glenn 2001b). This ***InBrief*** describes how business and industry partnerships are changing and provides examples of effective partnerships in career and technical education. It concludes with some recommendations that career and technical educators can use in establishing and maintaining partnerships with employers.

## A New Era for Partnerships

Shifts in traditional partnerships between schools and employers are occurring on at least two levels. Effective partnerships are no longer focused on specific activities and programs such as internships and adopt-a-school or on employers merely donating resources or money; instead, they have advanced to employers becoming actively involved in improving education (Curtis n.d.; Glenn 2001b; Otterbourg 1998). Ken Sorey, director of San Francisco's Bay Area School-to-Career Action Network, says that the new partnerships "are about strategic workforce development issues and how you leverage time, content, and resources . . . to serve educational reform and deal with the digital divide" (Glenn 2001b, p. 8).

Traditional partnerships that involve a one-to-one pairing of a school with a business are no longer sufficient to address the need for broad, systemic change in education. The current trend in partnership development is toward collaborations that address educational improvement and reform (Otterbourg 1998), and partnerships are now being formed under the auspices of intermediaries. Intermediaries are organizations that bring groups of employers and other community organizations together and then form linkages with schools to help young people combine learning with doing (Glenn 2001b; ***Intermediary Guidebook*** 2000). According to Sharon Dunphy, program manager for the National Alliance for Business, "intermediaries can bridge the two worlds of business and education. They can take the time to listen and to develop a common language, common goals, and clear expectations" (Glenn 2001b, p. 9).

The development of these intermediary organizations has been driven by reality. Most employers in the United States are not large enough to have the internal resources to develop effective relationships with schools as well as provide the type of work-based learning that is an important part of many partnerships. By creating intermediaries, the efforts of many employers can be combined to develop effective and meaningful relationships with schools (Committee for Economic Development 1998).

Intermediaries are able to address some obstacles that have hindered the success of school-business partnerships in the past, including taking on the difficult issues that need to be addressed in school reform and functioning on the edges of teaching and learning (Otterbourg 1998). Intermediaries can increase the opportunity for schools to offer work-based learning experiences for students that involve matching learning objectives with community resources and business needs in meaningful partnerships (Glenn 2001b; ***Intermediary Guidebook*** 2000).

Many of the new intermediary coalitions are based on the following common principles ("Linking School-to-Careers to the Broader Education and Workforce Development Agenda" 2000): (1) clear processes for specifying employer demand for employees; (2) existing methods for establishing standards based on the demand; (3) award of certifications or other credentials indicating the acquisition of employer-required competencies; and (4) programs and activities that develop the requisite skills leading to the certificates and credentials.

## Knowing One When You See It

Examples of intermediaries that foster the development of education-business partnerships include the following:

**Gulf Coast Process Technology Alliance.** Formed in 1995, the Gulf Coast Process Technology Alliance is designed to ensure uniform preparation of process technicians. The job of process technicians is vital to the success of the petrochemical industry; like many other jobs, it has become more complex in the past decade. The alliance now involves over 30 petrochemical and refining industries, 23 community colleges, and several software and training companies. From the beginning, the industries mandated that the educational institutions collaborate to develop a curriculum in process technology that was based on industry needs and sanctioned by the industry. Skills and tasks performed by process technicians were identified. Participation in externships helped chemistry, math, and physics faculty develop applied modules. Eight common core technical courses that have been developed and approved by the Alliance are required for all new Texas programs offering an associate's degree in process technology, and institutions in six other states have adopted the curriculum. Amaco estimates that it realizes a savings of $16,000 for every Alliance program graduate hired; Alliance graduates are qualified for a unit-specific job in an average of 44 days versus 120 days for nongraduates. A 40% reduction in safety incidents has been documented over a 5-year period ("2000 Business Coalition of the Year" 2000-2001).

**Prosser School of Technology Heavy Equipment Operation Program.** In New Albany, Indiana, local contractors have worked with the Prosser School of Technology to develop a heavy equipment operation program. Steps in developing the

program included checking local and national labor market data to verify the need for trained operators and surveying potential students. An advisory committee was formed to identify curriculum, find a training site, and locate equipment. After surveying several potential curricula, the curriculum developed by Associated Builders and Contractors (ABC) was selected. Employers donated equipment and a site for the program and developed a schedule for donating and/or loaning equipment for use in training. The 2-year curriculum includes heavy equipment maintenance and preparation for receiving a commercial driver's license. Because the program uses the ABC curriculum, students may earn a national certification in heavy equipment operation (Cunningham 2000).

**Partnership for America's Future, Inc.** The desire to give students real-world problems as well as the opportunity to solve them resulted in Partnership for America's Future, Inc. (PAF). PAF began because a business person and a teacher in Akron, Ohio wanted to do something for the 87% of the students at the teacher's school who were not going to college. They began by collecting problems from businesses and challenging students to find solutions. One student, for example, took on the problem of how to recycle cardboard cores and plugs made of wood chips and glue. He used the cores to design a piece of children's furniture that could be used in one of three ways: as a chair, a worktable, or a drawing easel. He received a cash prize and his design was featured in the FREY Scientific catalog. In a CNN report on the achievements of the school's students, the young inventor said that he would never have gone beyond the ninth grade without the program. Since its founding, PAF has helped over 50 students and teachers turn their products into nationally marketed products and developed a national invention competition that rewards two student inventors each month. PAF is sponsored by a number of partner companies, including John Hancock Mutual Life Insurance, Toyota, and Discover Magazine (Glenn 2001a).

## Some Common Denominators

All three examples involve multiple employers and educational institutions and all three provide applied learning opportunities. Two offer certification that is recognized by employers and programs that are designed to meet labor market needs. Two demonstrate evidence of impact. Four stages characterize effective business-education partnerships (Glenn 2001b):

1. **Planning and development.** Stakeholders are recruited; a vision, goals, and long- and short-term objectives are created; and an advisory or steering committee is appointed.
2. **Implementation and management.** Action teams are created to accomplish the priorities and strategies for addressing barriers and obstacles.
3. **Monitoring and evaluation.** What needs to be accomplished is determined, progress toward those goals is measured, and progress reported. Evaluation of the partnership's impact also takes place.
4. **Planning for the future.** Results are reviewed annually and planning for the next cycle occurs.

## Recommendations for CTE

What can career and technical educators do to establish and maintain effective partnerships?

- **Develop the partnership on the basis of mutual needs.** Successful partnerships meet the needs of both employers and schools. Employers get well-prepared employees and schools are able to provide training programs based on applied learning and that equip students for the labor market by providing them with appropriate credentials.
- **If possible, work with multiple employers.** Forming a partnership with multiple employers makes sense in most cases. By pooling their resources, employers can be in a better position to assist in meaningful ways. In the Prosser Heavy Equipment Program, for example, the local contractors were able to work together to ensure the program had the equipment it needed. However, a school can form an effective partnership with a single employer. High schools in the Seattle School District work with Cisco Systems and Microsoft to offer certification courses. These partnerships are formed one on one, that is, some high schools work with Cisco Systems and some work with Microsoft (Morris 2000).
- **Involve all stakeholders.** In addition to representatives from education and business, it is important to include students, parents, and other community members. All stakeholders should be represented on an advisory or steering committee that guides the ongoing work of the project.
- **Be sensitive to business culture.** The focus of business is on the bottom line. Educators need to respond quickly to requests for information, keep responses short, avoid using jargon in both written and oral communication, and give businesses lead time (Glenn 2001b).

For career and technical educators, developing effective and meaningful partnerships with employers just makes sense. Although time and effort are required to establish these partnerships, the payoff for everyone—schools, students, employers, and the community—can be great.

## References


"2000 Business Coalition of the Year: Gulf Coast Process Technology Alliance." *BCER Update*, December 2000-January 2001, p. 2. <www.bcer.org/newsletters/BCNUJ.pdf>

Committee for Economic Development. *The Employer's Role in Linking School and Work*. New York, NY: Committee for Economic Development, 1998. (ED 424 418) <www.ced.org/docs/sch2work.pdf>

Cunningham, S. "Roll Out the Bulldozers." *Techniques* 75, no. 8 (November-December 2000): 26-28.

Curtis, D. "Partnership Pays Off for Business and Schools." George Lucas Educational Foundation, n.d. <glef.org/business.html> (click on "more on business partnerships," then "Bayer Gets Into the Classroom Act")

Glenn, J. M. L. "Business Spotlight: Partnership for America's Future, Inc." *Business Education Forum* 55, no. 3 (February 2001a): 14-15.

Glenn, J. M. L. "The Giving and the Taking: Business-Education Partnerships Come of Age." *Business Education Forum* 55, no. 3 (February 2001b): 6-9, 12-13.

*The Intermediary Guidebook*. Boston, MA: Jobs for the Future; San Francisco: New Ways to Work, 2000. <www.intermediarynetwork.org>

"Linking School-to-Careers to the Broader Education and Workforce Development Agenda." *The Business View*, Fall 2000, p. 1.

*Making the Connection: Employer Associations' Actions for School-to-Career*. Washington, DC: Center for Workforce Success, National Association of Manufacturers and Center for Workforce Development, Institute for Educational Leadership, [2000].

Morris, K. "Tech Savvy: Companies Partner with Schools to Give Hands-On Training." *Seattle Times*, Education section, November 15, 2000.

Otterbourg, S. D. *Innovative Public-Private Partnerships: Educational Initiatives*. New York: Conference Board, 1998.



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